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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/355,637 08/02/99 HAMMER

K 051009/0122

EXAMINER

IM52/0213

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HON. S

ART UNIT

PAPER NUMBER

1772

DATE MAILED:

02/13/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/355,637

Applicant(s)

HAMMER ET AL.

Examiner

Sow-Fun Hon

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear how any material cannot be plastifiable when structurally degraded mechanically, thermally, chemically or otherwise.

3. Claims 3, 5, 7, 9-12, 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claims 3, 5, 7, 9-12, 14 recite the broad recitation "is

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from ... to ... % by weight”, and the claimd also recite “preferably from ... to ... % by weight” which is the narrower statement of the range/limitation. Correction is required.

5. Claims 6, 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For the same reasons given above, the phrase “preference being given to...” renders claim 6 indefinite, and the phrases “preferably ...” and “particularly preferably ...” render claim 17 indefinite. Correction may be effected by replacing the indefinite language with the phrase “selected from the group consisting of...”.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

7. Claims 1-9, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lim et al. (WO 93/19125).

Lim et al. have a starch and protein-based biodegradable thermoplastic composition that may be used to make extruded and molded articles. The composition comprises a crosslinked mixture of a native or modified starch in intimate admixture with a protein. A crosslinking agent is used to bind the starch and protein together (column 2, lines 20-31) in the amount of 0.1

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to 5.0 weight % (column 7, lines 8-10), and can be aldehydes, dialdehydes, epoxides (column 6, lines 30-38). The plasticizer in the composition is in the amount of about 0.2 to 20 weight %, and can be glycerol, sorbitol and cellose methyl ether (carboxymethylcellulose) (column 7, lines 18-34). The lubricant can be in the amount of about 2 weight %, and can be diglyceride or vegetable oil (column 8, lines 1-14). The starch to protein ratio about 95:5 to about 50:50 (column 5, lines 19-32). The protein can be casein (column 6, lines 3-9). The composition can further include a coloring agent (pigment) (column 8, lines 34-37).

### *Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins (US Patent 4,154,857) in view of Lim et al.

Higgins has a composition of collagen and polysaccharides extruded into tubular structures (film tubes) which may be used as casings for food products such as sausages (abstract). 2 to 30 weight % of glycerol is taught as a plasticizer (column 3, lines 14-17). 5 to 30 % by weight of non-collagenous fibers such as wood is taught (column 4, lines 5-8). Higgins teaches that the wood cellulose fibers have an average fiber length of about 0.04 inches (1 mm) (column 5, lines 29-48). Higgins fails to teach the claimed biodegradable matrix composition.

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Lim et al. have been discussed above and teaches the use of the composition in films. In addition, Lim et al. teach that apart from being biodegradable, the compositions may be comprised entirely of components that are edible by a human or other mammal, and that these edible compositions would be useful for making a packaging article that may be consumed along with the package contents (column 13, lines 16-23). It would have been obvious to one of ordinary skill in the art to have first molded the composition into the desired shape while the composition is still malleable, and then post-hardened the article to obtain the desired final product integrity.

Therefore it would have been obvious to one of ordinary skill in the art to have substituted the edible matrix taught by Lim et al. for the collagen matrix in the invention of Higgins et al. to obtain a more palatable sausage package.

10. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. in view of Lim et al. and Metzger (US Patent 5,681,517). Both Higgins et al. and Lim et al. fail to teach the thickness of the film (or film tube).

Metzger et al. have a casein film in the form of a planar film or a film tube especially suited for use in edible sausage casings (abstract). Metzger et al. teach that the film can have any desired thickness depending on the intended use, and give examples of thicknesses of from 0.1 to 1 mm for planar films, and 0.1mm to 0.3mm for film tubes (column 3, lines 30-35, column 5, lines 50-65). It would have been obvious to one of ordinary skill in the art to have coated the casein film on both sides of the single fibrous film of Higgins et al. as improved upon by Lim et al. to obtain a multilayer film packaging with the combined properties.

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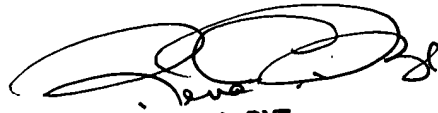
Therefore it would have been obvious to one of ordinary skill in the art to have used the edible film thickness taught by Metzger et al. in the invention of Higgins et al. as improved upon by Lim et al. to obtain an edible multilayered film for packaging sausages.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's primary examiner, Rena Dye, can be reached on (703)308-4331. The fax phone number for the organization where this application or proceeding is assigned is (703)305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

SA  
02/09/07

  
RENA L. DYE  
PRIMARY EXAMINER  
Lech Center 1700